

What is claimed is:

- 1           1. A digital content distributing system having a digital content  
2     distributing apparatus for distributing a digital content and an  
3     information processing apparatus for outputting a digital content  
4     distributed from the digital content distributing apparatus, wherein:  
5           said digital content distributing apparatus comprises:  
6           a storage device storing a digital content;  
7           an encryption processing device for performing an encryption  
8     process on a part of the digital content by using encryption key  
9     information shared with said information processing apparatus; and  
10          a distributing device for distributing the partly encrypted digital  
11     content to said information processing apparatus, and  
12          said information processing apparatus comprises:  
13          an input device for inputting a digital content distributed from  
14     said digital content distributing apparatus;  
15          a decryption processing device for performing a decryption  
16     process on the encrypted part of the inputted digital content by using the  
17     encryption key information shared with said digital content distributing  
18     apparatus; and  
19          an output device for outputting the digital content decrypted from  
20     the encrypted part,  
21          wherein said encryption processing device of said digital content

22 distributing apparatus performs an encryption process, with a formatting  
23 unit of the digital content in plaintext taken as one unit, on a part of the  
24 units as a subject of encryption processing.

1 2. A digital content distributing system having a digital content  
2 distributing apparatus for distributing a digital content and an  
3 information processing apparatus for outputting a digital content  
4 distributed from the digital content distributing apparatus, wherein:

5 said digital content distributing apparatus comprises:

6 a storage device storing a digital content partly encrypted by using  
7 encryption key information shared with said information processing  
8 apparatus; and

9 a distributing device for distributing the stored digital content to  
10 said information processing apparatus, and

11 said information processing apparatus comprises:

12 an input device for inputting a digital content distributed from  
13 said digital content distributing apparatus;

14 a decryption processing device for performing a decryption  
15 process on an encrypted part of the inputted digital content by using the  
16 encryption key information shared with said digital content distributing  
17 apparatus; and

18 an output device for outputting the digital content decrypted from  
19 the encrypted part,

20 wherein the digital content stored by said storage device of said  
21 digital content distributing apparatus is encrypted, with a formatting unit

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22 of the digital content in plaintext taken as one unit, on a part of the units  
23 as a subject of encryption.

1 3. A method for distributing a digital content from a digital  
2 content distributing apparatus to an information processing apparatus, in  
3 a digital content distributing system having the digital content  
4 distributing apparatus for distributing the digital content and the  
5 information processing apparatus for outputting the digital content  
6 distributed from the digital content distributing apparatus, said method  
7 comprising the steps of:

8 distributing, by said digital content distributing apparatus, a  
9 partly encrypted digital content which is encrypted by using encryption  
10 key information shared with said information processing apparatus, to  
11 said information processing apparatus; and

12 performing a decryption process using the encryption key  
13 information on an encrypted part of the digital content distributed from  
14 said digital content distributing apparatus by said information processing  
15 device;

16 wherein the digital content distributed by said digital content  
17 distributing apparatus is encrypted, with a formatting unit of the digital  
18 content in plaintext taken as one unit, on a part of the units as a subject of  
19 encryption.

1 4. A digital content distributing method according to claim 3,  
2 wherein, in the case that the digital content in plaintext is JPEG data

1           5. A digital content distributing method according to claim 3,  
2 wherein, in the case that the digital content in plaintext is JPEG data  
3 formatted by a JPEG (Joint Photographic Experts Group) scheme, the JPEG  
4 data is encrypted, with a compression unit block comprising 8 pixels  $\times$  8  
5 pixels taken as one unit, in a part of or the entire of compression unit  
6 blocks, on a high frequency region or a low frequency region within each  
7 block.

6. A digital content distributing method according to claim 3, wherein, in the case that the digital content in plaintext is MPEG data formatted by a MPEG (Moving Picture Experts Group) scheme, the MPEG data is encrypted, with one frame taken as one unit, on a part of or the entire of one group selected from a group of frames compressed with using correlation between the frames and a group of frames compressed without using correlation between the frames.

1           7. A digital content distributing method according to claim 3,  
2 wherein, in the case that the digital content in plaintext is sound data  
3 sampled based on frequency component and individually encoded, the  
4 sound data is encrypted, with an encoded unit sample taken as one unit,  
5 with respect to a high frequency component sample or low frequency

6 component sample.

1 8. A digital content distributing apparatus comprising:  
2 a storage device storing a digital content;  
3 an encryption processing device for performing an encryption  
4 process on a part of the digital content by using encryption key  
5 information shared with an information processing apparatus which is to  
6 be a destination of distribution of the digital content; and  
7 a distributing device for distributing the partly encrypted digital  
8 content to said information processing apparatus;  
9 wherein said encryption processing device performs an encryption  
10 process, with a formatting unit of the digital content in plaintext taken as  
11 one unit, on a part of the units as a subject of encryption processing.

1 9. A digital content distributing apparatus comprising:  
2 a storage device storing a digital content partly encrypted by using  
3 encryption key information shared with an information processing  
4 apparatus which is to be a destination of distribution; and  
5 a distributing device for distributing the stored digital content to  
6 said information processing apparatus;  
7 wherein the digital content stored by said storage device is  
8 encrypted, with a formatting unit of the digital content in plaintext taken  
9 as one unit, on a part of the units as a subject of encryption.

1 10. A digital content distributing apparatus according to claim 8,

2 wherein, in the case that the digital content in plaintext is JPEG data  
3 formatted by a JPEG (Joint Photographic Experts Group) scheme, the JPEG  
4 data is encrypted, with a compression unit block comprising 8 pixels × 8  
5 pixels taken as one unit, on a part of blocks.

1 11. A digital content distributing apparatus according to claim 9,  
2 wherein, in the case that the digital content in plaintext is JPEG data  
3 formatted by a JPEG (Joint Photographic Experts Group) scheme, the JPEG  
4 data is encrypted, with a compression unit block comprising 8 pixels × 8  
5 pixels taken as one unit, on a part of blocks.

1 12. A digital content distributing method according to claim 8,  
2 wherein, in the case that the digital content in plaintext is JPEG data  
3 formatted by a JPEG (Joint Photographic Experts Group) scheme, the JPEG  
4 data upon encryption is encrypted, with a compression unit block taken as  
5 one unit, in a part of or the entire of blocks, on a high frequency region or  
6 low frequency region within each block.

1 13. A digital content distributing method according to claim 9,  
2 wherein, in the case that the digital content in plaintext is JPEG data  
3 formatted by a JPEG (Joint Photographic Experts Group) scheme, the JPEG  
4 data upon encryption is encrypted, with a compression unit block taken as  
5 one unit, in a part of or the entire of blocks, on a high frequency region or  
6 low frequency region within each block.

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1           14. A digital content distributing method according to claim 8,  
2 wherein, in the case that the digital content in plaintext is MPEG data  
3 formatted by a MPEG (Moving Picture Experts Group) scheme, the MPEG  
4 data is encrypted, with one frame taken as one unit, on a part of or the  
5 entire of one group selected from a group of frames compressed without  
6 using correlation between the frames and a group of frames compressed  
7 with using correlation between the frames.

1           15. A digital content distributing method according to claim 9,  
2 wherein, in the case that the digital content in plaintext is MPEG data  
3 formatted by a MPEG (Moving Picture Experts Group) scheme, the MPEG  
4 data is encrypted, with one frame taken as one unit, on a part of or the  
5 entire of one group selected from a group of frames compressed without  
6 using correlation between the frames and a group of frames compressed  
7 with using correlation between the frames.

1           16. An information processing apparatus for outputting a digital  
2 content distributed from the digital content distributing apparatus  
3 according to claim 8, said information processing apparatus comprising  
4           an input device for inputting a digital content distributed from  
5 said digital content distributing apparatus;  
6           a decryption processing device for performing a decryption  
7 process on an encrypted part of the inputted digital content by using the  
8 encryption key information shared with said digital content distributing  
9 apparatus; and

10 an output device for outputting the digital content decrypted from  
11 the encrypted part.

1 17. An information processing apparatus for outputting a digital  
2 content distributed from the digital content distributing apparatus  
3 according to claim 9, said information processing apparatus comprising  
4 an input device for inputting a digital content distributed from  
5 said digital content distributing apparatus;

6 a decryption processing device for performing a decryption  
7 process on an encrypted part of the inputted digital content by using the  
8 encryption key information shared with said digital content distributing  
9 apparatus; and

10 an output device for outputting the digital content decrypted from  
11 the encrypted part.

1 18. A recording medium having recorded therein a digital content,  
2 wherein the digital content is encrypted, with a formatting unit of the  
3 digital content in plaintext taken as one unit, on a part of the units as a  
4 subject of encryption.

1 19. A recording medium according to claim 18, having recorded  
2 therein a digital content, wherein, in the case that the digital content in  
3 plaintext is JPEG data formatted by a JPEG (Joint Photographic Experts  
4 Group) scheme, the JPEG data is encrypted, with a compression unit block  
5 comprising 8 pixels × 8 pixels taken as one unit, on a part of blocks.



1           20. A recording medium according to claim 18, having recorded  
2   therein a digital content, wherein, in the case that the digital content in  
3   plaintext is JPEG data formatted by a JPEG (Joint Photographic Experts  
4   Group) scheme, the JPEG data is encrypted, with a compression unit block  
5   comprising 8 pixels  $\times$  8 pixels taken as one unit, in a part of or the entire  
6   of blocks, on a high frequency region or low frequency region within each  
7   block.

1           21. A recording medium according to claim 18, having recorded  
2   therein a digital content, wherein, in the case that the digital content in  
3   plaintext is MPEG data formatted by a MPEG (Moving Picture Experts  
4   Group) scheme, the MPEG data is encrypted, with one frame taken as one  
5   unit, on a part of or the entire of one group selected from a group of  
6   frames compressed without using correlation between the frames and a  
7   group of frames compressed with using correlation between the frames.